

## TABLE OF CONTENTS FOR VOLUME 42

GENERAL:	1, 287, 525, 781, 1041, 1353.
HISTORY AND BIOGRAPHY:	3, 290, 527, 784, 1042, 1354.
LOGIC AND FOUNDATIONS:	7, 292, 530, 787, 1049, 1356.
SET THEORY:	18, 295, 534, 792, 1056, 1364.
COMBINATORIAL THEORY, GRAPH THEORY:	19, 296, 535, 792, 1056, 1365.
ORDER, LATTICES, ORDERED ALGEBRAIC STRUCTURES:	27, 307, 542, 799, 1066, 1372.
GENERAL MATHEMATICAL SYSTEMS:	30, 309, 544, 802, 1069, 1374.
THEORY OF NUMBERS:	32, 311, 545, 803, 1069, 1375.
FIELDS AND POLYNOMIALS:	41, 321, 554, 812, 1081, 1384.
COMMUTATIVE ASSOCIATIVE RINGS AND ALGEBRAS:	43, 323, 555, 813, 1082, 1386.
ALGEBRAIC GEOMETRY:	47, 325, 557, 815, 1087, 1390.
LINEAR AND MULTILINEAR ALGEBRA, MATRIX THEORY:	52, 327, 560, 819, 1089, 1393.
ASSOCIATIVE RINGS AND ALGEBRAS:	54, 329, 564, 821, 1092, 1395.
NON-ASSOCIATIVE RINGS AND ALGEBRAS:	60, 333, 567, 827, 1099, 1401.
CATEGORY THEORY, HOMOLOGICAL ALGEBRA:	62, 333, 569, 828, 1101, 1403.
GROUP THEORY AND GENERALIZATIONS:	64, 334, 571, 830, 1105, 1408.
TOPOLOGICAL GROUPS AND LIE THEORY:	75, 345, 581, 840, 1116, 1418.
FUNCTIONS OF REAL VARIABLES:	79, 350, 584, 842, 1119, 1423.
MEASURE AND INTEGRATION:	83, 351, 586, 845, 1121, 1425.
FUNCTIONS OF A COMPLEX VARIABLE:	87, 355, 589, 849, 1125, 1428.
POTENTIAL THEORY:	96, 362, 597, 858, 1138, 1438.
SEVERAL COMPLEX VARIABLES:	97, 363, 598, 859, 1140, 1440.
SPECIAL FUNCTIONS:	100, 367, 600, 863, 1143, 1445.
ORDINARY DIFFERENTIAL EQUATIONS:	101, 371, 603, 865, 1147, 1447.
PARTIAL DIFFERENTIAL EQUATIONS:	116, 383, 613, 875, 1159, 1460.
FINITE DIFFERENCES AND FUNCTIONAL EQUATIONS:	127, 394, 624, 887, 1169, 1471.
SEQUENCES, SERIES, SUMMABILITY:	130, 395, 624, 888, 1170, 1472.
APPROXIMATIONS AND EXPANSIONS:	132, 398, 626, 889, 1171, 1474.
FOURIER ANALYSIS:	137, 402, 629, 892, 1177, 1478.
INTEGRAL TRANSFORMS, OPERATIONAL CALCULUS:	140, 405, 632, 899, 1185, 1484.
INTEGRAL EQUATIONS:	141, 406, 632, 900, 1186, 1487.
FUNCTIONAL ANALYSIS:	146, 408, 637, 903, 1190, 1490.
OPERATOR THEORY:	155, 413, 648, 919, 1202, 1507.
CALCULUS OF VARIATIONS, OPTIMAL CONTROL:	164, 419, 657, 934, 1213, 1517.
GEOMETRY:	166, 420, 659, 936, 1216, 1519.
CONVEX SETS AND GEOMETRIC INEQUALITIES:	170, 423, 664, 939, 1219, 1523.
DIFFERENTIAL GEOMETRY:	172, 424, 665, 940, 1221, 1524.
GENERAL TOPOLOGY:	185, 435, 674, 947, 1230, 1530.
ALGEBRAIC TOPOLOGY:	194, 445, 682, 954, 1236, 1537.
TOPOLOGY AND GEOMETRY OF MANIFOLDS:	200, 450, 685, 957, 1240, 1542.
PROBABILITY:	209, 454, 692, 962, 1252, 1547.
STATISTICS:	221, 464, 702, 974, 1266, 1558.
NUMERICAL METHODS:	227, 472, 710, 982, 1276, 1566.
COMPUTING MACHINES:	239, 486, 723, 990, 1287, 1580.
GENERAL APPLIED MATHEMATICS:	239, 488, 724, 990, 1289, 1581.
MECHANICS OF PARTICLES AND SYSTEMS:	240, 488, 724, 991, 1289, 1581.
ELASTICITY, PLASTICITY:	241, 488, 724, 992, 1291, 1582.
FLUID MECHANICS, ACOUSTICS:	243, 489, 726, 995, 1293, 1583.
OPTICS, ELECTROMAGNETIC THEORY:	245, 490, 729, 998, 1295, 1585.
CLASSICAL THERMODYNAMICS, HEAT TRANSFER:	491, 729, 999, 1296, 1586.
QUANTUM MECHANICS:	246, 491, 730, 999, 1296, 1586.
STATISTICAL PHYSICS, STRUCTURE OF MATTER:	254, 495, 738, 1007, 1305, 1597.
RELATIVITY:	256, 496, 742, 1007, 1307, 1599.
ASTRONOMY AND ASTROPHYSICS:	259, 497, 1011, 1601.
GEOPHYSICS:	745, 1309, 1601.
ECONOMICS, OPERATIONS RESEARCH, PROGRAMMING, GAMES:	259, 497, 745, 1011, 1309, 1601.
BIOLOGY AND BEHAVIORAL SCIENCES:	268, 504, 753, 1019, 1319, 1614.
SYSTEMS, CONTROL:	268, 505, 754, 1020, 1321, 1615.
INFORMATION AND COMMUNICATION, CIRCUITS, AUTOMATA:	272, 509, 767, 1027, 1329, 1626.

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
CHICAGO, ILLINOIS 60637  
U.S.A.  
FEBRUARY 1964  
TO THE DIRECTOR, NATIONAL BUREAU OF STANDARDS  
WASHINGTON, D.C. 20535  
FROM: DR. ROBERT M. HARRIS  
SUBJECT: A STUDY OF THE KINETICS OF THE  
REACTION OF HYDROGEN PEROXIDE WITH  
HYDROXYLAMINE HYDROCHLORIDE IN  
ACIDIC AQUEOUS SOLUTIONS  
Enclosed for the Bureau are two copies of a  
report of the results of a study of the kinetics  
of the reaction of hydrogen peroxide with  
hydroxylamine hydrochloride in acidic aqueous  
solutions. The study was carried out as part  
of a program of research on the kinetics of  
redox reactions in aqueous solution, which is  
being conducted in the Department of Chemistry,  
The University of Chicago, under the leadership  
of Dr. R. M. Harris. The results of the study  
are presented in the report, which is  
enclosed in two copies. One copy of the report  
is being retained by the Department of Chemistry,  
The University of Chicago, and the other copy  
is being submitted to the National Bureau of  
Standards for their files. The report is  
being submitted to the Bureau for their files  
in accordance with the provisions of the  
Memorandum of Understanding between the  
Department of Chemistry, The University of  
Chicago, and the National Bureau of Standards,  
dated January 1, 1963, which provides for the  
exchange of information and materials between  
the two organizations in the field of physical  
chemistry.

